

WHAT IS CLAIMED IS:

1. A method, comprising:

applying electrical stimuli to one or more released current carrying elements mounted above a supporting substrate biased to minimize electrostatic force between said one or more current released current carrying elements and said supporting substrate.

2. The method according to claim 1, wherein said one or more released current carrying elements are thermal actuators.

3. The method according to claim 1, further comprises:

applying two voltage pulses across said one or more released current carrying elements wherein said two voltages pulses are of equal form and equal magnitude having opposite polarity with respect to a voltage applied to said supporting substrate.

4. The method according to claim 1, further comprises:

applying two voltage pulses across said one or more released current carrying elements wherein said two voltages pulses are of unequal form and unequal magnitude having opposite polarity with respect to a voltage applied to said supporting substrate.

5. The method according to claim 1, wherein a conducting material exists between said released current carrying elements and said supporting substrate.

6. The method according to claim 1, wherein a non-conducting material exists between said released current carrying elements and said supporting substrate.

7. A method, comprising:

applying electrical stimuli to one or more released current carrying elements mounted above a supporting substrate biased to minimize electrical potential difference between said one or more released current carrying elements and one or more non-current carrying elements mounted above said supporting substrate that come in contact or close proximity during operation of said one or more released current carrying elements.

8. The method according to claim 7, wherein said one or more released current carrying elements are thermal actuators.

9. The method according to claim 7, wherein said one or more non-current carrying elements are linkage teeth.

10. The method according to claim 7, wherein said one or more non-current carrying elements are actuator teeth.

11. The method according to claim 7, further comprising:

applying two voltage pulses across said one or more released current carrying elements wherein said two voltages pulses are of equal form and equal magnitude having opposite polarity with respect to a common device voltage.

12. The method according to claim 7, further comprises:

applying two voltage pulses across said one or more released current carrying elements wherein said two voltages pulses are of unequal form and unequal magnitude having opposite polarity with respect to a common device voltage.

13. The method according to claim 7, further comprising:

minimization of absolute magnitude of bias voltages to avoid electrical breakdown by operating in a balanced biasing condition.

14. A method, comprising:

applying electrical stimuli to one or more released current carrying elements mounted above a supporting substrate biased to minimize electrostatic force between said one or more current released current carrying elements and said supporting substrate to minimize electrical potential difference between said one or more released current carrying elements and one or more non-current carrying elements mounted above said supporting substrate that come in contact or close proximity during operation of said one or more released current carrying elements.

15. The method according to claim 14, wherein said one or more released current carrying elements are thermal actuators.

16. The method according to claim 14, wherein said one or more non-current carrying elements are linkage teeth.

17. The method according to claim 14, wherein said one or more non-current carrying elements are actuator teeth.

18. The method according to claim 14, further comprises:

applying two voltage pulses across said one or more released current carrying elements wherein said two voltages pulses are of equal form and equal magnitude having opposite polarity with respect to a voltage applied to said supporting substrate.

19. The method according to claim 14, further comprises:

applying two voltage pulses across said one or more released current carrying elements wherein said two voltages pulses are of unequal form and unequal magnitude having opposite polarity with respect to a voltage applied to said supporting substrate.

20. The method according to claim 14, further comprising:

minimization of absolute magnitude of bias voltages to avoid electrical breakdown by operating in a balanced biasing condition.